Applicant: Stromblad Attorney's Docket No.: 09546-0028US1 / 55869 US SB/UP

Serial No.: 10/579,026 : May 10, 2006

Filed

Page : 2 of 9

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.-11. (canceled)

12. (previously presented) A heat transfer device comprising a plate heat exchanger, wherein the plate heat exchanger includes a plate package of heat transfer plates, which are arranged to form between the plates first passages for a heat transfer medium to be cooled and second passages for a cooling agent, wherein:

the plate package includes a first porthole channel and a second porthole channel, which communicate with the first passages, and a third porthole channel and a fourth porthole channel. which communicate with the second passages;

the first porthole channel forms at least a part of an inlet channel to supply the heat transfer medium to the plate heat exchanger;

the second porthole channel forms at least a part of an outlet channel to discharge the heat transfer medium from the plate heat exchanger;

the third porthole channel forms at least a part of an inlet channel to supply the cooling agent to the plate heat exchanger;

the fourth porthole channel forms at least a part of an outlet channel to discharge the cooling agent from the plate heat exchanger;

the heat exchanger device includes a conduit extending into the inlet channel for the cooling agent to supply the cooling agent to the third porthole channel and the second passages, and

Applicant: Stromblad Attorney's Docket No.: 09546-0028US1 / 55869 US

Serial No.: 10/579,026 SB/UP
Filed: May 10, 2006

Page : 3 of 9

wherein the conduit includes a conduit portion extending into and out of the outlet channel for the cooling agent such that heat exchange takes place between the cooling agent in the conduit portion and the cooling agent in the outlet channel. channel, and

wherein the outlet channel for the cooling agent includes the fourth porthole channel and a pipe which extends outwardly from the fourth porthole channel and the plate package, wherein the conduit portion extends at least into and out of the pipe.

13. (canceled)

- 14. (currently amended) A device according to claim [[13,]] 12, wherein the conduit portion extends into and out of the fourth porthole channel.
- 15. (previously presented) A device according to claim 12, wherein the conduit portion extends in a U-shaped path in the outlet channel.
- 16. (previously presented) A device according to claim 12, wherein the conduit portion includes surface enlarging members, which are provided on the conduit portion and extend in the outlet channel.
- 17. (previously presented) A device according to claim 16, wherein the surface enlarging members include flanges.
- 18. (previously presented) A device according to claim 12, wherein the conduit portion extends in a path which is significantly longer than double the distance between an entrance position for the entrance of the conduit portion into the outlet channel and a position of the conduit portion located as far as possible from the entrance position.

Applicant: Stromblad Attorney's Docket No.: 09546-0028US1 / 55869 US

Serial No.: 10/579,026 SB/UP

Filed : May 10, 2006 Page : 4 of 9

19. (previously presented) A device according to claim 12, wherein the conduit portion extends in a zigzag-shaped or helical-shaped path in the outlet channel.

- 20. (previously presented) A device according to claim 12, wherein the conduit is included in a cooling agent circuit, which includes a compressor, a condenser, an expansion valve and an evaporator that includes the plate heat exchanger.
- 21. (previously presented) A device according to claim 20, wherein the conduit portion is located between the condenser and the expansion valve.
- 22. (previously presented) A device according to claim 12, wherein the inlet and outlet channels are arranged such that the heat transfer medium flows through the first passages in a counterflow direction or a parallel flow direction in relation to the cooling agent flow in the second passages.